

Read EPA's Bristol Bay Watershed Assessment

Bristol Bay, Alaska

May 2012

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The public review draft of *"An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska"* presents **scientific and traditional knowledge** about the Kvichak and Nushagak river systems.

This fact sheet contains a brief overview of what you will find in the draft assessment and explains how you can provide feedback to EPA.

You can view and download the draft assessment and appendices on the EPA website at www.epa.gov/bristolbay. A paper copy of the assessment will soon be available in many local communities. For information, send an e-mail to smith.judy@epa.gov or call 503-326-6994.

About The Bristol Bay Salmon Fishery

Key findings of the draft assessment include:

- All five species of North American Pacific salmon are found in Bristol Bay. The Bristol Bay watershed supports the largest sockeye salmon fishery in the world. The Kvichak River produces more sockeye salmon than any other river in the world. The Nushagak River is the fourth largest producer of Chinook salmon in North America.
- The average annual run of sockeye salmon is about 37.5 million fish.
- Bristol Bay's wild salmon fishery and other ecological resources provide at least 14,000 full and part-time jobs and is valued at about \$480 million annually.
- Bristol Bay provides habitat for numerous animal species, including 35 fish species, more than 190 bird species and 40 animal species.
- Salmon are important in sustaining the traditional subsistence way of life of Alaska Native Villages in the watershed.

How Mining Could Affect Bristol Bay

EPA's draft study does not provide an in-depth assessment of any specific mining project, but instead assesses the potential environmental impacts associated with mining activities at a scale and with the characteristics that are realistically anticipated, given the nature of mineral deposits in the watershed, the requirements for successful mining development, and publicly available information

about potential mining activity. The report concludes that there is potential for certain activities associated with large-scale mining to have adverse impacts on the productivity and sustainability of the salmon fishery in the watershed.

Potential impacts could include loss of habitat used for salmon spawning and rearing.

Guide to the Assessment

Section 1: Introduction: We provide an overview of the assessment contents.

Section 2: Characterization of Current Condition: We summarize the existing conditions in the Kvichak and Nushagak River watersheds. The resources covered include salmon, resident fish, wildlife, marine resources, indigenous culture, fishery economics and roads.

Section 3: Problem Formulation: We describe what is and is not covered in the assessment. It explains how the assessment is focused on the effects of large-scale mining on the fishery in the Kvichak and Nushagak Rivers and is not an assessment of other benefits or risks from mining.

Section 4: Mining Background and Scenario: We share information on the type of mining that might occur and describe a plausible mining scenario created to evaluate risks to salmon.

Section 5: Risk Assessment Analysis: Routine Operations: We look at the potential risks from a routine permitted mining operation without any accidents or failures.

Section 6: Risk Assessment Analysis: Accidents and Failures: We assess the risks that could result

from mining accidents or failures during mining operation and into perpetuity after the mine closes.

Section 7: Cumulative and Watershed- Scale Effects: We describe the type of impacts that might occur if multiple mines are developed to extract minerals from claims throughout the Kvichak and Nushagak River watersheds.

Section 8: Risk Characterization: We describe the overall risks to salmon and other fish, wildlife, and indigenous culture. We also summarize limitations of the assessment and uncertainty that remains.

Appendices: We provide over 800 additional pages of detailed information that was used and summarized in the main assessment document.

Appendix A – Fishery Resources of Bristol Bay

Appendix B – Freshwater Non-salmon Fishes

Appendix C – Wildlife Resources

Appendix D – Ecological Knowledge and Culture

Appendix E – Economic Activity and Values

Appendix F – Road and Pipelines

Appendix G – Marine Estuarine Processes

Appendix H – Geology

Appendix I – Water Quality Mitigation

Next Steps

The public comment period following the release of the Bristol Bay Watershed Assessment is open until **July 23, 2012**. Public meetings and tribal consultation are planned in the Bristol Bay region and Anchorage this summer.

The draft assessment will be evaluated by a scientific peer review panel. In August, the peer review panel will hold a meeting in Anchorage that is open to the public. A summary of public comments will also be provided to the peer review panel.

A final assessment will be published following peer review, tribal consultation and public comment.

Schedule

- **May 17 to July 23, 2012** – Public comment opportunity for the draft assessment.
- **Late May** – Public comment opportunity for the draft questions to the peer review panel.
- **June 4 to 7, 2012** – Public meetings at locations throughout Bristol Bay
- **August 7 to 8, 2012** – Scientific Peer Review Panel public meeting in Anchorage.
- **Late 2012** – Final Bristol Bay Watershed Assessment released

About Peer Review

A scientific peer review panel will weigh in on the Bristol Bay Watershed Assessment. Peer review is a critical tool used by EPA to ensure that high quality, sound science is used by the Agency. Peer reviewers are experts who were not involved in the development of the assessment who take an unbiased look at the science.

The peer review panel will take a close look at the science and recommend any needed improvements to EPA. The peer review of the Bristol Bay assessment will help ensure the highest quality scientific document.

A contractor accepted peer review nominations from the public in February 2012 and is selecting a 12-member independent panel with expertise in mining, salmon biology, hydrology, aquatic ecology, biogeochemistry, seismology, ecotoxicology, wildlife ecology and indigenous Alaskan cultures.

EPA will accept public comments on the questions that the peer review panel will consider as it evaluates the assessment. Find information on how and when to review the draft charge questions and provide comments at www.epa.gov/bristolbay

Background

We began this study in February 2011, in response to growing interest in large-scale mining in the watershed from a number of stakeholders and local communities with a range of views and will lead to a better understanding of potential environmental impacts of these activities on the watershed.

Under the Clean Water Act, EPA has the authority and responsibility to protect the nation's water and perform scientific studies that enhance the agency's and the public's knowledge of water resources.

EPA's focus in the assessment is scientific and technical; the agency has made no judgments about the use of its regulatory authority under the Clean Water Act and the draft study in no way prejudices future consideration of proposed mining activities.

The Bristol Bay watershed is composed of nine major rivers, but the assessment is focused on the Kvichak and Nushagak river drainages - the primary areas in the watershed open to large-scale mining development.

The draft assessment was prepared by a team of scientists and technical experts from EPA Region 10, EPA Office of Water, and the EPA Office of Research and Development. We relied on existing scientific data and also collected traditional ecological knowledge from Alaska Native Villages.

EPA committed to issuing a draft of its assessment in the spring of 2012 for public comment and rigorous scientific peer review. We will consult and coordinate with tribes, coordinate with federal and state agencies, and seek input from the public and industry about how to improve the assessment.

How to Submit your Comments to the EPA Public Docket

- ▶ Submit them online at www.regulations.gov
Specify Docket Number
#EPA-HQ-ORD-2012-0276
This is the Preferred method
- ▶ Send EPA an e-mail at ORD.Docket@epa.gov
Include, **EPA-HQ-ORD-2012-0276**
in the subject line
- ▶ Fax them to 202-566-1753.
Include, **EPA-HQ-ORD-2012-0276**
in the subject line
- ▶ Send a letter to the EPA Bristol Bay docket at:
Office of Environmental Information (OEI)
Docket (Mail Code: 2822T)
Docket # **EPA-HQ-ORD-2012-0276**
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460.
- ▶ Comment at a public meeting during the week of June 4-7, 2012
- ▶ Make a request to accommodate language or other special needs by contacting Judy Smith at smith.judy@epa.gov or 503-326-6994

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*Bristol Bay, Alaska
May 2012*



Attend a Public Meeting

- **Anchorage** – Monday, June 4, 5:30 p.m.
University of Alaska,
Wendy Williamson Auditorium
- **Dillingham** – Tuesday, June 5, 11:30 a.m.
Middle School Gymnasium
- **Naknek** – Tuesday, June 5, 5:00 p.m.
Naknek School Auditorium
- **Levelock**: Wednesday, June 6, 4:00 p.m.
Rainbow Hall
- **Igiugig** – Wednesday, June 6, 5:00 p.m.
Igiugig Airport Hangar
- **Seattle** – Thursday, June 6, 2:00 p.m.
Jackson Federal Building
4th Floor N. Auditorium
- **Nondalton** – Thursday, June 7, 5:00 p.m.
Nondalton Community Center
- **New Stuyahok**: Thursday, June 7, 1:00 p.m.
Cetuyaraq Community Center

Attend a Webinar

You can also attend a virtual public meeting on the internet about the Bristol Bay watershed assessment. Times and locations will be posted soon. There will be a presentation and some limited opportunity to submit questions to the EPA presenters. Follow the link from www.epa.gov/bristolbay to register.

For More Information:

 **Website:** www.epa.gov/bristolbay
 **Email:** r10bristolbay@epa.gov

Join the Bristol Bay listserv

to get regular e-mail updates about EPA's work. Send an e-mail message to smith.judy@epa.gov or click the link on the web page.

Community Involvement Coordinator

Judy Smith 503-326-6994
smith.judy@epa.gov

Tribal Liaison

Tami Fordham 907-271-1484
fordham.tami@epa.gov

Management Lead

Richard Parkin 206-553-8574
parkin.richard@epa.gov